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10/829,585	04/22/2004	Alan Thomas Schachtely	136239	6713

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EXAMINER
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GAMI, TEJAL

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2121

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/829,585	<b>Applicant(s)</b> SCHACHTELY ET AL.	
	<b>Examiner</b> TEJAL J. GAMI	<b>Art Unit</b> 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

1. This office action is responsive to an AMENDEMNT entered April 17, 2009 for the patent application 10/829585.

### **Status of Claims**

2. Claims 1-42 were rejected in the last Office Action dated January 21, 2009.  
As a response to the January 21, 2009 office action, Applicant has Amended claims 1, 15, and 29.

Claims 1-42 are now presented for examination in this office action.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.  
The title should indicate incrementally testing a rule.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Al-Attar et al. (U.S. Publication Number: 2004/0243530).

**As to independent claim 1**, Al-Attar discloses a computer-implemented method of managing a machinery monitoring system (e.g., on-line performance monitoring system integrated into a process control system) (see Paragraph [0086]), said method comprising:

relating an asset output to at least one asset input wherein the at least one asset input includes at least one of a measured process parameter and a derived process parameter relatable to the asset output (e.g., variable relating to process conditions and a plurality of outcomes) (see Abstract; and Paragraph [0009] and [0086]);

generating at least one rule (e.g., rule generation module) (see Paragraph [0058]) based on the relation wherein the at least one rule defines the asset output based on the at least one asset input (e.g., generating a performance improvement rule set for at least one process factor from a generated rule set for the at least one process factor) (see Abstract; and Paragraph [0009]);

selecting at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied asset data (e.g., historic process data) (see Paragraph [0012] and [0055]);

testing the at least one rule incrementally using the selected asset data (e.g., rule verification module comprises a rule test sub-module) (see Paragraph [0015]) and by comparing each asset output to each respective expected asset output (e.g., plurality of

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outcomes and an activity flag at each decision point) (see Paragraph [0042]), wherein the test comprises a plurality of incremental steps to be performed (e.g., a rule verification module for verifying the generated rule set) (see Paragraph [0014]);

determining an expected asset output for the selected data (e.g., each rule) after the plurality of incremental steps are performed (e.g., each rule including a plurality of decision points) (see Paragraph [0042]);

monitoring the asset output (e.g., performance improvement rule; performance monitoring system) (see Paragraph [0071] and [0086]) of the at least one rule at each increment (e.g., rules being verified by determining that each rule is satisfied by the data) (see Paragraph [0065]);

displaying incremental results (e.g., each rule) after each of the plurality of incremental steps are completed (e.g., each rule including a plurality of decision points, a plurality of outcomes and an activity flag at each decision point) (see Paragraph [0042]; and Figures 2 and 3); and

outputting a test result (e.g., proposed to process operator) (see Paragraph [0084] and [0086]).

**As to dependent claim 10**, Al-Attar teaches a method in accordance with claim 1 wherein relating an asset output to at least one input comprises relating a measurable machine asset output to at least one input (e.g., variable relating to process conditions and a plurality of outcomes) (see Abstract; and Paragraph [0009] and [0086]).

**As to dependent claim 11**, Al-Attar teaches a method in accordance with claim 1 wherein relating an asset output to at least one input comprises relating a measurable

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machine asset output to at least one input (e.g., variable relating to process conditions and a plurality of outcomes) (see Abstract; and Paragraph [0009] and [0086]) wherein the at least one input is indicative of a machine asset anomalous behavior (e.g., improvement determination module within an on-line performance monitoring system integrated into a process control system to alert a process operator to deviation from expected performance) (see Abstract; and Paragraph [0009] and [0086]).

**As to dependent claim 12**, Al-Attar teaches a method in accordance with claim 1 wherein generating at least one rule comprises resolving the operands for the at least one rule (e.g., logical outcome) (see Paragraph [0073]).

**As to dependent claim 13**, Al-Attar teaches a method in accordance with claim 1 wherein generating at least one rule comprises documenting the rule logic for the at least one rule (e.g., logical outcome) (see Paragraph [0073]).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-9 and 14-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Al-Attar et al. (U.S. Publication Number: 2004/0243530) and further in view of Kuznetsov et al. (U.S. Publication Number: 2006/0265689).

**As to independent claim 15**, Al-Attar discloses a computer-implemented machinery monitoring system for a plant (e.g., on-line performance monitoring system integrated into a process control system) (see Paragraph [0086]), said system comprising:

- a client system comprising a user interface (e.g., on-line performance monitoring system integrated into a process control system) (see Paragraph [0086]);

- a database for storing Rule Sets (e.g., storage locations, typically databases) (see Paragraph [0051]), wherein the Rule Sets include at least one rule expressed as a relational expression of a real-time data output relative to a real-time data input that includes at least one of a measured process parameter and a derived process parameter relatable to the real-time data output (e.g., variable relating to process conditions and a plurality of outcomes) (see Abstract; and Paragraph [0009] and [0086]), wherein the relational expression is specific to a plant asset (e.g., on-line performance monitoring system integrated into a process control system) (see Paragraph [0086]); and

- a processor programmed to control said machinery monitoring system to (e.g., on-line performance monitoring system integrated into a process control system) (see Paragraph [0086]), said processor programmed to:

  - generate a plant asset operational rule (e.g., rule generation module) (see Paragraph [0058]) from an application expert wherein the operational rule defines the real-time data output based on the at least one real-time data input (e.g., generating a performance improvement rule set for at least one process

factor from a generated rule set for the at least one process factor) (see Abstract; and Paragraph [0009] and [0086]);

test said rule data (e.g., rule verification module comprises a rule test sub-module) (see Paragraph [0015]) based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data (e.g., historic process data) (see Paragraph [0012] and [0055]), wherein the test includes comparing the real-time output to an expected real-time output (e.g., plurality of outcomes and an activity flag at each decision point) (see Paragraph [0042]), and wherein the test comprises a plurality of incremental steps to be performed (e.g., a rule verification module for verifying the generated rule set) (see Paragraph [0014]);

determine an asset output (e.g., each rule) after the plurality of incremental steps are performed (e.g., each rule including a plurality of decision points) (see Paragraph [0042]);

display incremental results (e.g., performance improvement rule; performance monitoring system) (see Paragraph [0071] and [0086]) after each of the plurality of incremental steps are completed (e.g., rules being verified by determining that each rule is satisfied by the data) (see Paragraph [0065]); and

output a test result (e.g., proposed to process operator) (see Paragraph [0084] and [0086]).

Al-Attar clearly teaches a user (e.g., process operator) (see Al-Attar: Abstract), but does not mention a security control password. Kuznetsov teaches prompt a user for



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a security control password (e.g., sign/verify) (see Kuznetsov: Paragraph [0021]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized a security control password as taught by Kuznetsov to the user of Al-Attar because security is a concern (see Kuznetsov: Paragraph [0021]).

**As to independent claim 29**, Al-Attar discloses a computer program embodied on a computer readable medium for managing a machinery monitoring system using a server system (e.g., on-line performance monitoring system integrated into a process control system) (see Paragraph [0086]) coupled to a client system and a database (e.g., storage locations, typically databases) (see Paragraph [0051]), said client system including a user interface (e.g., on-line performance monitoring system) (see Paragraph [0086]), and then:

relates an asset output to at least one asset input that includes at least one of a measured process parameter and a derived process parameter relatable to the asset output (e.g., variable relating to process conditions and a plurality of outcomes) (see Abstract; and Paragraph [0009] and [0086]);

generates a plant asset operational rule (e.g., rule generation module) (see Paragraph [0058]) from an application expert wherein the operational rule defines an asset output based on at least one asset input (e.g., generating a performance improvement rule set for at least one process factor from a generated rule set for the at least one process factor) (see Abstract; and Paragraph [0009]);

tests said rule (e.g., rule verification module comprises a rule test sub-module) (see Paragraph [0015]) based on at least one of live asset data, historical asset data,

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user-supplied asset data, and third party supplied data (e.g., historic process data) (see Paragraph [0012] and [0055]) wherein the testing includes comparing the asset output to a respective expected asset output (e.g., plurality of outcomes and an activity flag at each decision point) (see Paragraph [0042]), wherein the test comprises at least one step (e.g., a rule verification module for verifying the generated rule set) (see Paragraph [0014]);

displays (e.g., performance improvement rule; performance monitoring system) (see Paragraph [0071] and [0086]) incremental results of the at least one step (e.g., rules being verified by determining that each rule is satisfied by the data) (see Paragraph [0065]); and

outputs said results of said test (e.g., proposed to process operator) (see Paragraph [0084] and [0086]).

Al-Attar clearly teaches said program comprising a code segment (e.g., logical outcome) (see Al-Attar: Paragraph [0073]), but does not mention a security control password. Kuznetsov teaches prompt a user for a security control password (e.g., sign/verify) (see Kuznetsov: Paragraph [0021]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized a security control password as taught by Kuznetsov to the program of Al-Attar because the markup language processing device can process XML message for security (see Kuznetsov: Abstract).

**As to dependent claim 2**, Al-Attar teaches a method in accordance with claim 1.

Al-Attar clearly teaches further comprising bundling the at least one rule into a Rule Set (see Al-Attar: Paragraph [0009]), but does not mention encryption code. Kuznetsov teaches encryption code (see Kuznetsov: Paragraph [0142]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized an encryption code as taught by Kuznetsov to the Rule Set of Al-Attar because encryptions or transformations defined by the rule set are applied to tagged message data portions (see Kuznetsov: Paragraph [0101]).

**As to dependent claim 3**, the combination of Al-Attar and Kuznetsov teaches a method in accordance with claim 2 wherein Al-Attar teaches bundling the at least one rule into a Rule Set (see Al-Attar: Paragraph [0009]). And Kuznetsov teaches comprises bundling a plurality of rules into an XML file (see Kuznetsov: Paragraph [0014]).

**As to dependent claim 4**, the combination of Al-Attar and Kuznetsov teaches a method in accordance with claim 2 wherein Al-Attar teaches bundling the at least one rule into a Rule Set (see Al-Attar: Paragraph [0009]). And Kuznetsov teaches comprising bundling at least one of a rule documentation page and a Rule Set documentation page into the Rule Set (see Kuznetsov: Paragraph [0033]).

**As to dependent claim 5**, Al-Attar teaches a method in accordance with claim 1 further comprising:

transmitting the Rule Set to the machinery monitoring system (e.g., performance improvement rule; performance monitoring system) (see Paragraph [0071] and [0086]);

importing the Rule Set into the monitoring system (e.g., rules being verified by determining that each rule is satisfied by the data) (see Paragraph [0065]).

Al-Attar clearly teaches a Rule Set (see Al-Attar: Paragraph [0009]), but does not mention decrypting the Rule Set encryption. Kuznetsov teaches decrypting the Rule Set encryption (see Kuznetsov: Paragraph [0142]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized decrypting encryption as taught by Kuznetsov to the Rule Set of Al-Attar because that specifies application of a different security (see Kuznetsov: Paragraph [0142]).

**As to dependent claim 6**, the combination of Al-Attar and Kuznetsov teaches a method in accordance with claim 5 wherein Kuznetsov teaches importing the Rule Set comprises:

locating Rule Set files (see Kuznetsov: Paragraph [0026]);

prompting a user for an encryption key (see Kuznetsov: Paragraph [0101]); and

interpreting the Rule Set file (see Kuznetsov: Paragraph [0142]).

**As to dependent claim 7**, the combination of Al-Attar and Kuznetsov teaches a method in accordance with claim 6 Kuznetsov teaches further comprising:

entering Rule Set information into an enterprise database (e.g., rule set database 128) (see Kuznetsov: Paragraph [0078]); and

refreshing a list of Rule Sets based on the Rule Set information (e.g., rule set database 128) (see Kuznetsov: Paragraph [0078]).

**As to dependent claim 8**, the combination of Al-Attar and Kuznetsov teaches a method in accordance with claim 5 wherein Kuznetsov teaches importing the Rule Set comprises:

checking an enterprise for an existing copy of the imported Rule Set (e.g., rule set database 128) (see Kuznetsov: Paragraph [0146]);

selectively updating any of the existing Rule Sets if the imported Rule Set is a different version than the existing Rule Set (e.g., rule set database 128) (see Kuznetsov: Paragraph [0146]); and

updating assets using the imported Rule Set (e.g., rule set database 128) (see Kuznetsov: Paragraph [0146]).

**As to dependent claim 9**, the combination of Al-Attar and Kuznetsov teaches a method in accordance with claim 5 Kuznetsov teaches further comprising substantially preventing importing the Rule Set into the monitoring system unless an authorized encryption key is used (see Kuznetsov: Paragraph [0142]).

**As to dependent claim 14**, Al-Attar teaches a method in accordance with claim 1 wherein relating an asset output to at least one input (e.g., variable relating to process conditions and a plurality of outcomes) (see Abstract; and Paragraph [0009] and [0086]). Al-Attar clearly teaches a user (e.g., process operator) (see Al-Attar: Abstract), but does not mention a security control password. Kuznetsov teaches prompt a user for a security control password (e.g., sign/verify) (see Kuznetsov: Paragraph [0021]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the

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invention was made to have utilized a security control password as taught by Kuznetsov to the user of Al-Attar because security is a concern (see Kuznetsov: Paragraph [0021]).

**As to dependent claim 16**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 15 wherein Kuznetsov teaches said processor is further programmed to bundle the at least one rule into a Rule Set that includes a Rule Set encryption code (see Kuznetsov: Paragraph [0142]).

**As to dependent claim 17**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 16 wherein Kuznetsov teaches said processor is further programmed to bundle a plurality of rules into an XML file (see Kuznetsov: Paragraph [0014]).

**As to dependent claim 18**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 16 wherein Kuznetsov teaches said processor is further programmed to bundle at least one of a rule documentation page and a Rule Set documentation page into said Rule Set (see Kuznetsov: Paragraph [0033]).

**As to dependent claim 19**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 15 wherein said processor is further programmed to:

transmit said Rule Set to said at least one machinery monitoring system (e.g., performance improvement rule; performance monitoring system) (see Al-Attar: Paragraph [0071] and [0086]);

decrypt said Rule Set encryption (see Kuznetsov: Paragraph [0142]); and

import said Rule Set into said at least one monitoring system (e.g., rules being verified by determining that each rule is satisfied by the data) (see Al-Attar: Paragraph [0065]).

**As to dependent claim 20**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 19 wherein Kuznetsov teaches said processor is further programmed to:

locate Rule Set files (see Kuznetsov: Paragraph [0026]);

prompt a user for an encryption key (see Kuznetsov: Paragraph [0101]); and

interpret said Rule Set file (see Kuznetsov: Paragraph [0142]).

**As to dependent claim 21**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 20 wherein Kuznetsov teaches said processor is further programmed to:

enter Rule Set information into said database (e.g., rule set database 128) (see Kuznetsov: Paragraph [0078]); and

refresh a list of Rule Sets based on said Rule Set information (e.g., rule set database 128) (see Kuznetsov: Paragraph [0078]).

**As to dependent claim 22**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 19 wherein Kuznetsov teaches said processor is further programmed to:

check said database for an existing copy of said imported Rule Set (e.g., rule set database 128) (see Kuznetsov: Paragraph [0146]);

selectively update any of said existing Rule Sets if said imported Rule Set is a different version than said existing Rule Set (e.g., rule set database 128) (see Kuznetsov: Paragraph [0146]); and

update assets using said imported Rule Set (e.g., rule set database 128) (see Kuznetsov: Paragraph [0146]).

**As to dependent claim 23**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 19 wherein Kuznetsov teaches said processor is further programmed to substantially prevent importing said Rule Set into said at least one monitoring system unless an authorized encryption key is used (see Kuznetsov: Paragraph [0142]).

**As to dependent claim 24**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 15 wherein Al-Attar teaches said processor is further programmed to relate a measurable machine asset output to at least one input (e.g., variable relating to process conditions and a plurality of outcomes) (see Al-Attar: Abstract; and Paragraph [0009] and [0086]).

**As to dependent claim 25**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 15 wherein Al-Attar teaches said processor is further programmed to relate a measurable machine asset output to at least one input (e.g., variable relating to process conditions and a plurality of outcomes) (see Al-Attar: Abstract; and Paragraph [0009] and [0086]) that is indicative of a machine asset anomalous behavior (e.g., improvement determination module within an on-line performance monitoring system integrated into a process control system to alert a



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process operator to deviation from expected performance) (see Al-Attar: Abstract; and Paragraph [0009] and [0086]).

**As to dependent claim 26**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 15 wherein Al-Attar teaches said processor is further programmed to resolve the operands for the at least one rule (e.g., logical outcome) (see Al-Attar: Paragraph [0073]).

**As to dependent claim 27**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 15 wherein Al-Attar teaches said processor is further programmed to receive, from a user, documentation of the rule logic for said at least one rule (e.g., logical outcome) (see Al-Attar: Paragraph [0073]).

**As to dependent claim 28**, the combination of Al-Attar and Kuznetsov teaches a system in accordance with claim 15 wherein Kuznetsov teaches said processor is further programmed to prompt the user to enter a security control password (e.g., sign/verify) (see Kuznetsov: Paragraph [0021]).

**As to dependent claim 30**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 29 Kuznetsov teaches further comprising a code segment that bundles said at least one rule into a Rule Set that includes a Rule Set encryption code (see Kuznetsov: Paragraph [0142]).

**As to dependent claim 31**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 30 Kuznetsov teaches further comprising a code segment that bundles a plurality of rules into an XML file (see Kuznetsov: Paragraph [0014]).

**As to dependent claim 32**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 30 Kuznetsov teaches further comprising a code segment that bundles at least one of a rule documentation page and a Rule Set documentation page into said Rule Set (see Kuznetsov: Paragraph [0033]).

**As to dependent claim 33**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 29 further comprising a code segment that:

transmits said Rule Set to said at least one machinery monitoring system (e.g., performance improvement rule; performance monitoring system) (see Al-Attar: Paragraph [0071] and [0086]);

decrypts said Rule Set encryption (see Kuznetsov: Paragraph [0142]); and  
imports said Rule Set into said at least one monitoring system system (e.g., rules being verified by determining that each rule is satisfied by the data) (see Al-Attar: Paragraph [0065]).

**As to dependent claim 34**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with 33 Kuznetsov teaches further comprising a code segment that:

locates Rule Set files (see Kuznetsov: Paragraph [0026]);  
prompts a user for an encryption key (see Kuznetsov: Paragraph [0101]); and  
interprets said Rule Set file (see Kuznetsov: Paragraph [0142]).

**As to dependent claim 35**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 34 Kuznetsov teaches further comprising a code segment that:

enters Rule Set information into an enterprise database (e.g., rule set database 128) (see Kuznetsov: Paragraph [0078]); and

refreshes a list of Rule Sets based on said Rule Set information (e.g., rule set database 128) (see Kuznetsov: Paragraph [0078]).

**As to dependent claim 36**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 33 Kuznetsov teaches further comprising a code segment that:

checks an enterprise database for an existing copy of said imported Rule Set (e.g., rule set database 128) (see Kuznetsov: Paragraph [0146]);

selectively updates any of said existing Rule Sets if said imported Rule Set is a different version than said existing Rule Set (e.g., rule set database 128) (see Kuznetsov: Paragraph [0146]); and

updates assets using said imported Rule Set (e.g., rule set database 128) (see Kuznetsov: Paragraph [0146]).

**As to dependent claim 37**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 33 Kuznetsov teaches further comprising a code segment that substantially prevents importing said Rule Set into said at least one monitoring system unless an authorized encryption key is used (see Kuznetsov: Paragraph [0142]).

**As to dependent claim 38**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 29 Al-Attar teaches further comprising a code segment that relates a measurable machine asset output to at least one input

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(e.g., variable relating to process conditions and a plurality of outcomes) (see Al-Attar: Abstract; and Paragraph [0009] and [0086]).

**As to dependent claim 39**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 29 Al-Attar teaches further comprising a code segment that relates a measurable machine asset output to at least one input (e.g., variable relating to process conditions and a plurality of outcomes) (see Al-Attar: Abstract; and Paragraph [0009] and [0086]) wherein said at least one input is indicative of a machine asset anomalous behavior (e.g., improvement determination module within an on-line performance monitoring system integrated into a process control system to alert a process operator to deviation from expected performance) (see Al-Attar: Abstract; and Paragraph [0009] and [0086]).

**As to dependent claim 40**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 29 Al-Attar teaches further comprising a code segment that resolves the operands for said at least one rule (e.g., logical outcome) (see Al-Attar: Paragraph [0073]).

**As to dependent claim 41**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 29 Al-Attar teaches further comprising a code segment that receives, from a user, documentation of the rule logic for said at least one rule (e.g., logical outcome) (see Al-Attar: Paragraph [0073]).

**As to dependent claim 42**, the combination of Al-Attar and Kuznetsov teaches a computer program in accordance with claim 29 Kuznetsov teaches further comprising a

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code segment that prompts the user to enter a security control password (e.g., sign/verify) (see Kuznetsov: Paragraph [0021]).

### ***Response to Arguments***

8. Applicant's amendment and arguments filed April 17, 2009 have been fully considered. The amendment does not overcome the original art rejection and the arguments are not persuasive. The following are the Examiner's observations in regard thereto.

#### **Applicant Argues:**

Al-Attar describes a process development systems 4 including a performance improvement rule generation module 9 for generating a performance improvement rule set for at least one process factor from a generated rule set for the at least one process factor. Each rule includes a plurality of decision points corresponding to split variables relating to process conditions and a plurality of outcomes. The performance improvement rule generation module 9 is configured, for each rule from each generated rule set, to attach an activity flag at each decision point and thereby generate a performance improvement rule. The activity flag has one of two values indicative of whether the respective split variable is alterable or non-alterable by a process operator such as to enable operation of the performance improvement rule in determining which of the outcomes is attainable for given process conditions. Notably, Al-Attar does not describe nor suggest testing a rule with a test that includes a plurality of incremental steps to be performed before determining an asset output and displaying incremental results after each of the plurality of incremental steps are completed.

#### **Examiner Responds:**

Examiner is not persuaded. See prior art, Paragraph [0042] and Figure 2 & 3 where Al-Attar discloses each rule (e.g., asset out) including a plurality of decision points, a plurality of outcomes and an activity flag at each decision point (e.g., incremental steps/results). Under such consideration the prior art anticipates a test that includes a plurality of incremental steps to be performed before determining an asset output and displaying incremental results after each of the plurality of incremental steps are completed.

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Applicant Argues:

Al-Attar does not describe nor suggest a computer-implemented method of managing a machinery monitoring system as is recited in Claim 1.

Examiner Responds:

Examiner is not persuaded. See prior art, Paragraph [0086] for “on-line performance monitoring system integrated into a process control system,” and Paragraph [0003] for examples of relevant sectors. Under such considerations, the prior art anticipates computer-implemented method of managing a machinery monitoring system.

Applicant Argues:

The Examiner alleges that Al-Attar describes a rule including a plurality of decision points, a plurality of outcomes, and an activity flag at each decision point, and therefore describes displaying incremental results. However, even if the Examiner's allegation is true, Al-Attar still fails to describe nor suggest each and every feature of amended Claim 1, 15, and 29. At best, Al-Attar describes a rule decision base tree (see Figures 2 and 3 of Al-Attar) that includes several decision points that provide multiple outcomes, however, not only are the "decision points" based on acquired data from a user or a database and not computed data, such data is not displayed to a user after the completion of each. Rather, the only data shown to a user after completion are the multiple outcomes (the alleged "asset output"). In contrast, amended Claim 1, 15, and 29 tests a rule with a test that includes a plurality of incremental steps that are performed before determining an asset output and displays incremental results after each of the plurality of incremental steps are completed. More specifically, as recited, each incremental step result of the test leading up to a final result is displayed.

Examiner Responds:

Examiner is not persuaded. The prior art gives various examples of displaying incremental results after each of the plurality of incremental steps are completed. For one example, see Figures 2 and 3 for decision points and outcomes; and a second example, see Paragraph [0042] for an activity flag indicating alterability by a process operator; and a third example, see Paragraphs [0084] and [0086] for proposed to

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process operator, data logging module and performance improvement determination deployed at the process system to allow for on-site operation. Under such considerations, the prior art anticipates displaying incremental results.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tejal J. Gami whose telephone number is (571) 270-1035. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert DeCady/  
Supervisory Patent Examiner  
Tech Center 2100

/TJG/